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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,940	02/27/2002	Dwip N. Banerjee	AUS9-2001-0370-US1	5268

7590 03/24/2005  
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EXAMINER
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LIN, KELVIN Y

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,940

Applicant(s)

BANERJEE ET AL.

Examiner

Kelvin Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **Detailed Action**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 11 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

a) Claim 11 is objected to because a depending claim must depend from a previous claim, not being itself. It is suggested that claim 11 depends on claim 10.

2. The above noted problems are not necessarily an exhaustive listing, but are meant to be exemplary of the types of errors present. It is incumbent upon an applicant to ensure that any amendment filed resolves all deficiencies and places the claims in compliance with 35 USC 112.

3. Appropriate correction is required

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-26 are rejected under 35 USC 102(e) as being anticipated by McCanne et al., (US Patent No. 6611872).
3. Regarding claim 1, McCanne teaches a method for multicasting content to remote users, comprising:
  - designating a portion of the content to each one of plural multicast routers (McCanne, col.7, l.9-13, col.10, l.5-12);
  - registering a data stream of interest for each user (McCanne, col.24, l. 10-13);
  - associating each user with a multicast router that geographically corresponds to the particular user and the data stream of interest registered by the particular user (McCanne, col.24, l.12-13); and

- transmitting the content to the users via the multicast routers  
(McCanne, col.12, l.11-16).

4. Regarding claim 2, McCanne further discloses the method claim 1, wherein the content is delivered hierarchically from a host sever at a top level that controls the entire portion of the content to the plural multicast routers at a mid level that receive the designated portions of the content that they are capable of accommodating to the users at a lowest level which receive parts of the designated portions representing respective user registered data streams of interest (McCanne, col.17, l.47-57, col.18, l.10-15, l.60-62, l.65-67, col.19, l.54-55, col.25, l.11-15).
5. Regarding claim 3, McCanne further discloses the method claim 1, wherein registering the data stream of interest includes requesting a user to identify the user's particular streams of interest to the multicasting system (McCanne, col. 9, l.27-37).
6. Regarding claim 4, McCanne further discloses the method of claim 1, further comprising using network socket options with special flags to register streams of interest for particular multicast groups (McCanne, col.12, l.21-23)
7. Regarding claim 5, McCanne further discloses the method of claim 1, further comprising locating a multicast router on a subnet for receiving identified streams of interest and adding the streams of interest to the located router's list of streams of interest (McCanne, col. 25, l.11-38).
8. Regarding claim 6, McCanne further discloses the method of claim 1, further

comprising communicating the router's streams of interest to multicast groups of interest and to other multicast routers to allow relevant routers on the network to have information about the streams of interests of other routers (McCanne, col.24, l.39-67).

9. Regarding claim 7, McCanne further discloses the method of claim 1, further comprising examining the streams of interest lists of other routers and forwarding users content based on their identified streams of interest (McCanne, col.19, l.19-25).
10. Regarding claim 8, McCanne further discloses the method of claim 1, wherein the network is the Internet (McCanne, col.10, l.27).
11. Regarding claim 9, McCanne further discloses the method of claim 8, wherein the content includes at least one of audio and video Internet multimedia broadcast (McCanne, col.3, l.11-17).
12. Regarding claim 10, McCanne further discloses in a computer network system, a method for providing content from a host server to remote network users that connect to the network with different bandwidths, the method comprising:
  - establishing group membership for a multicast group (McCanne, col.6, l.37-40);
  - establishing an individualized set of broadcast criteria (McCanne, col.16, l.53-63);
  - disseminating broadcast data within the group into discrete segments (McCanne, col.5, l.10-11, col.11, l.17-21); and

- determining which segments of the broadcast data will be sent to remote servers of the network (McCanne, col.15, l.4-7).
13. Regarding claim 11, McCanne further discloses the method of claim 10, wherein establishing an individualized set of broadcast criteria includes registering streams of interest of the host (McCanne, col.9, l.19-21).
  14. Regarding claim 12, McCanne further discloses the method of claim, further comprising using network socket options with special flags to register streams of interest for particular multicast groups (McCanne, col.12, l.21-23).
  15. Regarding claim 13, McCanne further discloses the method of claim 10, further comprising communicating the router's streams of interest to multicast groups of interest and to other multicast routers to allow relevant routers on the network to have information about the streams of interests of other routers (McCanne, col.24, l.39-67).
  16. Regarding claim 14, McCanne further discloses the method of claim 13, further comprising examining the streams of interest lists of other routers and forwarding users content based on their identified streams of interest (McCanne, col.19, l.19-25).
  17. Regarding claim 15, McCanne further discloses the method of claim 10, wherein the network is the Internet (McCanne, col.10, l.27).
  18. Regarding claims 16-20 have similar limitations as claims 1,2,5, and 8.
- Therefore, Claims 16-20 are rejected for the same reasons set forth in the rejection of claims 1,2,5, and 8.

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19. Regarding claims 21-26 have similar limitations as claims 1-5.

Therefore, Claims 21-26 are rejected for the same reasons set forth in the rejection of claims 1-5.



### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to application's disclosure.

- Malkinet al., (US Patent No. 5940391) Method and Apparatus for Reconfigurable and Adaptive Stream Multicast.
- Hoffberg et al., (US Patent No. 6850252) Intelligent Electronic Appliance System and Method.
- Sim et al., (US Patent No. 6857012) Method And Apparatus For Initializing a New Node in a Network.
- Holler J., (US PG Pub No. 2003/0004882) Optimized Server For Streamed Applications.
- NPL – Stolarz D., Peer-to-peer streaming media delivery, Peer-to-peer Computing, 2001, Proceedings. First International Conference on, 27-29 Aug. 2001 pp.48-52.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 703-605-1726. The examiner can normally be reached on Flexible 4/9/5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kyl  
3/16/05

  
JACK B. HARVEY  
SUPERVISOR, PATENT EXAMINER